



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,945	01/31/2001	Sugitaka Oteki	202507US2	1573

22850 7590 01/19/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

POON, KING Y

ART UNIT PAPER NUMBER

2624

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/772,945	Applicant(s) OTEKI ET AL.	
	Examiner King Y. Poon	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3-5,8-10,12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/27/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The new title has been accepted.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 11: Newly added claimed limitations "transferring without storing each one of the n lines of the image data to a predetermined destination" is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1: Newly added claimed limitations "a switch configured to divide image data into mxn pixels, having n lines with m pixels per line and to transfer without storing in the switch each one of the n lines of image data to a predetermined

Art Unit: 2624

destination " is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 6: Newly added claimed limitations "means for transferring without storing in the means for transferring each one of n lines of the image data to a predetermined destination " is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 2 and 7: Claims 2 and 7 are rejected under 35 U.S.C. 112, first paragraph because they depend on rejected claim 1, and 6.

Note: Applicant appears to refer the above limitations as the function of the switch 903 of fig. 3. The examiner does not found the limitation, in the specification, that switch 903 does not hold any signals from the line data (image data). It is unclear how signals from the line data to reach 901 if switch 903 does not have the properties of holding any signals before the signals are being passed along to memory 901.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2624

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 6, 7, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino (US 5,754,705).

Regarding claims 1, 6: Okino teaches an image processor (image processing system, column 1, lines 10-15) comprising: a switch (the control program/after modification that controls the logic such that the image data from the shift register would be correctly going into the right address of memory 306 of column 3, lines 1-5) configured to divide image data into $m \times n$ pixels, having n lines with m pixels per one line and to transfer without storing in the switch (the image data are stored in a shift register and the control program itself) each one of the n lines of image data to a predetermined destination (306, column 3, lines 1-5); a storage unit (306, column 3, line 1) including $n-1$ number of memories (7 lines of memories, column 3, lines 30-40, each line forms a memory) each configured to store one line of the n lines of image data (column 3, lines 1-5, column 3, lines 30-45); sending the image data of the image data to the predetermined destination; a compression unit (307, column 3, lines 18-21) which batch compresses the image data of $m \times n$ pixels, wherein (n) lines of image data are being send to said ($n-1$) number of memories, and a remaining one line of image data are being send directly to said compression unit; and to control the storage unit to transfer the ($n-1$) lines of the image data stored in the ($n-1$) number of memoies to said compression unit (column 3, lines 30-41).

Okino, while discussion the well known conventional invention, does not disclosed a control unit for controlling the image processor.

However, Okino, in column 5, lines 15-30, teaches to use a controlling unit to control the entire image processor in his invention.

Since the conventional invention discussed by Okino is not controlled by human, it requires some kind of controlling device to control the timing of the operation.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the conventional invention to include: controlling unit to control the entire image processor in order for the conventional invention (image processor) to be properly functioning.

Regarding claims 2, 7: Okino teaches wherein said storage unit comprises (n-1) number of FIFO memories (column 3, lines 40-50), and said control unit controls sending of each line of the image data divided by said dividing unit to said FIFO memories (column 3, lines 5-16), respectively.

Regarding claim 11: Okino teaches an image processing method comprising the steps of: dividing image data into $m \times n$ pixels, having n lines with m pixels per one line (column 2, lines 50-67); transferring (from 104 to 105, fig. 3) without storing (no memory between 104 and 104, fig. 3) each one of the n lines of the image data to a predetermined destination; switching the predetermined destination for the each one of the n lines of image data (column 3, lines 1-10); storing one lines of the image data of pixels (column 3, lines 5-10) in each of (n-1) number of memories (306, fig. 2B); batch compressing the image data of $m \times n$ pixels (column 3, lines 35-40), wherein said transferring directly transfer (n-1) lines of the n lines of image data to said (n-1) number of memories, and the remaining one of the n lines of image data directly to a

Art Unit: 2624

compression unit based on the switching and transfer the (n-1) lines stored in the (n-1) number of memories to the compression unit (column 3, lines 30-50).

Okino, while discussing the well known conventional invention, does not disclose a control unit for controlling the image processor.

However, Okino, in column 5, lines 15-30, teaches to use a controlling unit to control the entire image processor in his invention.

Since the conventional invention discussed by Okino is not controlled by human, it requires some kind of controlling device to control the timing of the operation.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the conventional invention to include: controlling unit to control the entire image processor in order for the conventional invention (image processor) to be properly functioning.

Response to Arguments

6. Applicant's arguments filed 10/11/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Okino does not teach transferring without storing each of the n lines of the image data to a predetermined destination, switching the predetermined destination for each one of the n lines of image data; storing one line of the image data of pixels in each of (n-1) number of memories; batch compressing the image data of mxn pixels, wherein said transferring directly transfer (n-

1) lines of the n lines of image data to said $(n-1)$ number of memories, and the remaining one of the n lines of image data directly to a compression unit based on the switching and transfer the $(n-1)$ lines stored in the $(n-1)$ number of memories to the compression unit.

In reply: From fig. 3, the controller 107 controlling the transferring of image data from 104 to 105. Such transfer does not shown a memory in between 104 and 105. Furthermore, fig. 2A of Okino shows there are 7 rows of memory of 306. Without proper control of switching; how can the n line of image data being properly placed into the correct row of memories ? Therefore, event Okino might not mention switching in the reference, proper control of switching is a must in Okino in order for Okino's invention to be functioned.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2624

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 3, 2006



**KING Y. POON
PRIMARY EXAMINER**